0480
1633-0950

#5 OIPE

RAW SEQUENCE LISTING DATE: 02/06/2002
PATENT APPLICATION: US/09/943,108A TIME: 08:35:49

Input Set : N:\Crf3\RULE60\09943108.txt
Output Set: N:\CRF3\02062002\I943108A.raw


```
 4 <110> APPLICANT: Black, Michael T.
 7 <120> TITLE OF INVENTION: SIGNAL RECOGNITION PARTICLE POLYPEPTIDES
 8       AND POLYNUCLEOTIDES
10 <130> FILE REFERENCE: GM50035
12 <140> CURRENT APPLICATION NUMBER: 09/943,108A
C--> 13 <141> CURRENT FILING DATE: 2001-08-30
15 <150> PRIOR APPLICATION NUMBER: 09/035,382
16 <151> PRIOR FILING DATE: 1998-05-03
18 <160> NUMBER OF SEQ ID NOS: 8
20 <170> SOFTWARE: FastSEQ for Windows Version 3.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 1368
24 <212> TYPE: DNA
25 <213> ORGANISM: Staphylococcus aureus
27 <400> SEQUENCE: 1
28  atggcatttg aaggcttatc agaacgcctg caagcgacga tgcaaaaaat gcgtggtaag      60
29  ggtaaactta ctgaagctga tataaagata atgatgcgtg aagtaagatt agcgttattt     120
30  gaggctgacg taaactttaa agtggtaaaa gaatttatta aaacagtatc agaacgcgca     180
31  ttaggttccg atgtaatgca atcattaaca ccagggcaac aagttattaa aatagttcaa     240
32  gatgaattaa cgaagttgat gggtggagaa aatacatcga ttaatatgtc aaataaacca     300
33  cctactgttg ttatgatggt tggtttacaa ggtgctggta aaacaacaac tgcaggtaaa     360
34  ttagcattat tgatgcgtaa aaaatacaac aaaaaaccta tgttagttgc agcagatatt     420
35  tatcgtccag cagcgataaa tcaattacaa acagtaggga aacaaattga tattcctgta     480
36  tacagtgaag gagatcaagt aaagccacaa caaattgtaa ctaatgcatt aaaacatgct     540
37  aaagaagaac atttagactt tgtaatcatt gatacagcag gtcgattaca catcgatgaa     600
38  gcattgatga acgaattaaa agaagtaaaa gaaattgcta aaccaaacga aattatgtta     660
39  gttgtcgatt caatgacggg tcaagatgct gtcaatgttg cagaatcttt tgacgatcaa     720
40  cttgatgtca caggtgttac cttaactaaa ttagatggtg atacacgtgg tggtgcagct     780
41  ttatctattc gttcggtgac acaaaaacca attaaatttg ttggtatgag tgaaaagtta     840
42  gatggtttag agctattcca tcctgaacgt atggcatcac gtattttagg tatgggtgat     900
43  gtgttaagtt taattgaaaa agcgcaacaa gatgtggatc aagaaaaagc aaaagattta     960
44  gagaaaaaga tgcgtgagtc atcgtttact ttagatgatt ttttagaaca acttgatcag    1020
45  gtgaaaaatc taggaccact ggatgatatt atgaaaatga ttccaggtat gaataaaatg    1080
46  aaagggctag ataagcttaa tatgagtgaa aagcaaattg atcatattaa agcgattatc    1140
47  cagtcaatga cgccggctga aagaaacaat ccagacacat tgaatgtatc acgtaaaaag    1200
48  cgtattgcta aagggtctgg tcgttcatta caagaagtca atcgtttgat gaaacaattt    1260
49  aacgatatga agaaaatgat gaaacaattc actggtggcg gtaaaggtaa aaaaggtaaa    1320
50  cgcaatcaaa tgcaaaatat gttaaaaggt atgaatttac cgttttaa                 1368
52 <210> SEQ ID NO: 2
53 <211> LENGTH: 455
54 <212> TYPE: PRT
55 <213> ORGANISM: Staphylococcus aureus
57 <400> SEQUENCE: 2
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```
Met Ala Phe Glu Gly Leu Ser Glu Arg Leu Gln Ala Thr Met Gln Lys
 1               5                  10                  15
Met Arg Gly Lys Gly Lys Leu Thr Glu Ala Asp Ile Lys Ile Met Met
            20                  25                  30
Arg Glu Val Arg Leu Ala Leu Phe Glu Ala Asp Val Asn Phe Lys Val
        35                  40                  45
Val Lys Glu Phe Ile Lys Thr Val Ser Glu Arg Ala Leu Gly Ser Asp
    50                  55                  60
Val Met Gln Ser Leu Thr Pro Gly Gln Gln Val Ile Lys Ile Val Gln
65                  70                  75                  80
Asp Glu Leu Thr Lys Leu Met Gly Gly Glu Asn Thr Ser Ile Asn Met
                85                  90                  95
Ser Asn Lys Pro Pro Thr Val Val Met Met Val Gly Leu Gln Gly Ala
            100                 105                 110
Gly Lys Thr Thr Thr Ala Gly Lys Leu Ala Leu Leu Met Arg Lys Lys
        115                 120                 125
Tyr Asn Lys Lys Pro Met Leu Val Ala Ala Asp Ile Tyr Arg Pro Ala
    130                 135                 140
Ala Ile Asn Gln Leu Gln Thr Val Gly Lys Gln Ile Asp Ile Pro Val
145                 150                 155                 160
Tyr Ser Glu Gly Asp Gln Val Lys Pro Gln Gln Ile Val Thr Asn Ala
                165                 170                 175
Leu Lys His Ala Lys Glu Glu His Leu Asp Phe Val Ile Ile Asp Thr
            180                 185                 190
Ala Gly Arg Leu His Ile Asp Glu Ala Leu Met Asn Glu Leu Lys Glu
        195                 200                 205
Val Lys Glu Ile Ala Lys Pro Asn Glu Ile Met Leu Val Val Asp Ser
    210                 215                 220
Met Thr Gly Gln Asp Ala Val Asn Val Ala Glu Ser Phe Asp Asp Gln
225                 230                 235                 240
Leu Asp Val Thr Gly Val Thr Leu Thr Lys Leu Asp Gly Asp Thr Arg
                245                 250                 255
Gly Gly Ala Ala Leu Ser Ile Arg Ser Val Thr Gln Lys Pro Ile Lys
            260                 265                 270
Phe Val Gly Met Ser Glu Lys Leu Asp Gly Leu Glu Leu Phe His Pro
        275                 280                 285
Glu Arg Met Ala Ser Arg Ile Leu Gly Met Gly Asp Val Leu Ser Leu
    290                 295                 300
Ile Glu Lys Ala Gln Gln Asp Val Asp Gln Glu Lys Ala Lys Asp Leu
305                 310                 315                 320
Glu Lys Lys Met Arg Glu Ser Ser Phe Thr Leu Asp Asp Phe Leu Glu
                325                 330                 335
 Gln Leu Asp Gln Val Lys Asn Leu Gly Pro Leu Asp Asp Ile Met Lys
            340                 345                 350
 Met Ile Pro Gly Met Asn Lys Met Lys Gly Leu Asp Lys Leu Asn Met
        355                 360                 365
 Ser Glu Lys Gln Ile Asp His Ile Lys Ala Ile Ile Gln Ser Met Thr
    370                 375                 380
 Pro Ala Glu Arg Asn Asn Pro Asp Thr Leu Asn Val Ser Arg Lys Lys
```

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Input Set : N:\Crf3\RULE60\09943108.txt
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```
107  385                 390                 395                 400
108  Arg Ile Ala Lys Gly Ser Gly Arg Ser Leu Gln Glu Val Asn Arg Leu
109                  405                 410                 415
110  Met Lys Gln Phe Asn Asp Met Lys Lys Met Met Lys Gln Phe Thr Gly
111              420                 425                 430
112  Gly Gly Lys Gly Lys Lys Gly Lys Arg Asn Gln Met Gln Asn Met Leu
113          435                 440                 445
114  Lys Gly Met Asn Leu Pro Phe
115      450                 455
117 <210> SEQ ID NO: 3
118 <211> LENGTH: 792
119 <212> TYPE: DNA
120 <213> ORGANISM: Staphylococcus aureus
122 <400> SEQUENCE: 3
123  atggcatttg aaggcttatc agaacgcctg caagcgacga tgcaaaaaat gcgtggtaag      60
124  ggtaaactta ctgaagctga tataaagata atgatgcgtg aagtaagatt agcgttattt     120
125  gaggctgacg taaactttaa agtggtaaaa gaatttatta aaacagtatc agaacgcgca     180
126  ttaggttccg atgtaatgca atcattaaca ccagggcaac aagttattaa aatagttcaa     240
127  gatgaattaa cgaagttgat gggtggagaa aatacatcga ttaatatgtc aaataaacca     300
128  cctactgttg ttatgatggt tggtttacaa ggtgctggta aaacaacaac tgcaggtaaa     360
129  ttagcattat tgatgcgtaa aaaatacaac aaaaaaccta tgttagttgc agcagatatt     420
130  tatcgtccag cagcgataaa tcaattacaa acagtaggga aacaaattga tattcctgta     480
131  tacagtgaag gagatcaagt aaagccacaa caaattgtaa ctaatgcatt aaaacatgct     540
132  aaagaagaac atttagactt tgtaatcatt gatacagcag gtcgattaca catcgatgaa     600
133  gcattgatga acgaattaaa agaagtaaaa gaaattgcta aaccaaacga aattatgtta     660
134  gttgtcgatt caatgacggg tcaagatgct gtcaatgttg cagaatcttt tgacgatcaa     720
135  cttgatgtca caggtgttac cttaactaaa ttagatggtg atacccgtgg tggtgcagct     780
136  ttatctattc gt                                                        792
138 <210> SEQ ID NO: 4
139 <211> LENGTH: 264
140 <212> TYPE: PRT
141 <213> ORGANISM: Staphylococcus aureus
143 <400> SEQUENCE: 4
144  Met Ala Phe Glu Gly Leu Ser Glu Arg Leu Gln Ala Thr Met Gln Lys
145   1               5                  10                  15
146  Met Arg Gly Lys Gly Lys Leu Thr Glu Ala Asp Ile Lys Ile Met Met
147              20                  25                  30
148  Arg Glu Val Arg Leu Ala Leu Phe Glu Ala Asp Val Asn Phe Lys Val
149          35                  40                  45
150  Val Lys Glu Phe Ile Lys Thr Val Ser Glu Arg Ala Leu Gly Ser Asp
151      50                  55                  60
152  Val Met Gln Ser Leu Thr Pro Gly Gln Gln Val Ile Lys Ile Val Gln
153  65                  70                  75                  80
154  Asp Glu Leu Thr Lys Leu Met Gly Gly Glu Asn Thr Ser Ile Asn Met
155                  85                  90                  95
156  Ser Asn Lys Pro Pro Thr Val Val Met Met Val Gly Leu Gln Gly Ala
157              100                 105                 110
158  Gly Lys Thr Thr Thr Ala Gly Lys Leu Ala Leu Leu Met Arg Lys Lys
159          115                 120                 125
```

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PATENT APPLICATION: US/09/943,108A TIME: 08:35:49

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Output Set: N:\CRF3\02062002\I943108A.raw

```
160  Tyr Asn Lys Lys Pro Met Leu Val Ala Ala Asp Ile Tyr Arg Pro Ala
161      130                 135                 140
162  Ala Ile Asn Gln Leu Gln Thr Val Gly Lys Gln Ile Asp Ile Pro Val
163  145                 150                 155                 160
164  Tyr Ser Glu Gly Asp Gln Val Lys Pro Gln Gln Ile Val Thr Asn Ala
165                  165                 170                 175
166  Leu Lys His Ala Lys Glu Glu His Leu Asp Phe Val Ile Ile Asp Thr
167              180                 185                 190
168  Ala Gly Arg Leu His Ile Asp Glu Ala Leu Met Asn Glu Leu Lys Glu
169          195                 200                 205
170  Val Lys Glu Ile Ala Lys Pro Asn Glu Ile Met Leu Val Val Asp Ser
171      210                 215                 220
172  Met Thr Gly Gln Asp Ala Val Asn Val Ala Glu Ser Phe Asp Asp Gln
173  225                 230                 235                 240
174  Leu Asp Val Thr Gly Val Thr Leu Thr Lys Leu Asp Gly Asp Thr Arg
175                  245                 250                 255
176  Gly Gly Ala Ala Leu Ser Ile Arg
177              260
179 <210> SEQ ID NO: 5
180 <211> LENGTH: 500
181 <212> TYPE: DNA
182 <213> ORGANISM: Staphylococcus aureus
184 <400> SEQUENCE: 5
185  aaacatcttg caaatgaatt taaatttaac gacttctcaa gacgtcgtat aaagtaaaca      60
186  atgatataaa tgatttatac ttgcaattaa ctattaaaat atagtaatat atatcttgcc     120
187  gtgctaggtg gggaggtagc ggttccctgt actcgaaatc cgctttatgc gaggcttaat     180
188  tcctttgttg aggccgtatt tttgcgaagt ctgcccaaag cacgtagtgt ttgaagattt     240
189  cggtcctatg caatatgaac ccatgaacca tgtcaggtcc tgacggaagc agcattaagt     300
190  ggatcatcat atgtgccgta gggtagccga gatttagcta acgactttgg ttacgttcgt     360
191  gaattacgtt cgatgcttag gtgcacggtt ttttatttt taaatattaa accgattatt     420
192  aagagttgaa aatatatatt tatttataga agctactttc ttgaagacaa ttcagcgtat     480
193  tatacgtgga acatgtttgt                                               500
195 <210> SEQ ID NO: 6
196 <211> LENGTH: 358
197 <212> TYPE: DNA
198 <213> ORGANISM: Staphylococcus aureus
200 <400> SEQUENCE: 6
201  acttgcaatt aactattaaa atatagtaat atatatcttg ccgtgctagg tggggaggta      60
202  gcggttccct gtactcgaaa tccgctttat gcgaggctta attcctttgt tgaggccgta     120
203  tttttgcgaa gtctgcccaa agcacgtagt gtttgaagat ttcggtccta tgcaatatga     180
204  acccatgaac catgtcaggt cctgacggaa gcagcattaa gtggatcatc atatgtgccg     240
205  tagggtagcc gagatttagc taacgacttt ggttacgttc gtgaattacg ttcgatgctt     300
206  aggtgcacgg ttttttattt tttaaatatt aaaccgatta ttaagagttg aaaatata       358
208 <210> SEQ ID NO: 7
209 <211> LENGTH: 276
210 <212> TYPE: DNA
211 <213> ORGANISM: Staphylococcus aureus
213 <400> SEQUENCE: 7
214  cttgccgtgc taggtgggga ggtagcggtt ccctgtactc gaaatccgct ttatgcgagg      60
```

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Input Set : N:\Crf3\RULE60\09943108.txt
Output Set: N:\CRF3\02062002\I943108A.raw

```
     215  cttaattcct ttgttgaggc cgtatttttg cgaagtctgc ccaaagcacg tagtgtttga     120
     216  agatttcggt cctatgcaat atgaacccat gaaccatgtc aggtcctgac ggaagcagca     180
     217  ttaagtggat catcatatgt gccgtagggt agccgagatt tagctaacga ctttggttac     240
     218  gttcgtgaat tacgttcgat gcttaggtgc acggtt                               276
     220 <210> SEQ ID NO: 8
     221 <211> LENGTH: 275
     222 <212> TYPE: DNA
     223 <213> ORGANISM: Staphylococcus aureus
     225 <220> FEATURE:
     226 <221> NAME/KEY: misc_feature
     227 <222> LOCATION: (1)...(275)
     228 <223> OTHER INFORMATION: n = A,T,C or G
     230 <400> SEQUENCE: 8
     231  aacaatgccg tttcaatata atatttcaaa acatcttgca aatgaattta aatttaccga      60
     232  cttctcaaga cgtcgtataa agtaaacaat gatataaatg atttatactt gcaattaact     120
W--> 233  attnaaatat agtaatatat atctttccgt gctaggtggg gaggtagcgg ttccctgtac     180
     234  tcgaaatccg ctttatgcga ggcttaattc ctttgttgag gccgtatttt tgcgaagtct     240
     235  gcccaaagca cgtagtgttt gaagatttcg gtcct                                275
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VERIFICATION SUMMARY DATE: 02/06/2002
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Input Set : N:\Crf3\RULE60\09943108.txt
Output Set: N:\CRF3\02062002\I943108A.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8